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Department of Agriculture

Soil Conservation Service

Reno, Nevada



Nevada Water Supply Outlook

January 1, 1985



Foreward

How Forecasts Are Made

Most of the annual streamflow in the Western United States originates as snowfall. This snowfall accumulates high in the mountains during winter and early spring. As the snowpack accumulates, hydrologists estimate the runoff that will occur when it melts. Predictions are based on careful measurements of snow water equivalent at selected index points. Precipitation, temperature, soil moisture and antecedent streamflow data are viewed in conjunction with snowpack data to prepare funoff forecasts. This report presents a comprehensive picture of water supply outlook conditions for areas dependent upon surface runoff. It includes selected streamflow forecasts, summarized snowpack and precipitation data, reservoir storage data and narratives describing current conditions.

Streamflow forecasts are cooperatively generated by Soil Conservation Service and National Weather Service hydrologists. Forecasts become more accurate as mroe data affecting runoff becomes known. For this reason forcasts are issued that reflect three future precipitation conditions — Below Normal, Average, and Above Normal. These forecasts are termed reasonable minimum, most probable, and reasonable maximum. Actual streamflow can be expected to fall between the lower and upper forecast values eight out of ten years.

Snowpack data are obtained by using a combination of manual and automated measurement methods. Manual readings of snow depth and water equivalent are taken at locations called snow courses on a monthly or semi-monthly schedule during the winter. In addition, snow water equivalent, precipitation, temperature, and other parameters are monitored on a daily basis and transmitted via radio telemetry to central data collection facilities. Both monthly and daily data are used to project snowmelt runoff.

For More Information

Copies of Monthly Water Supply Outlook Reports and other reports may be obtained from the states listed below.

STATE	ADDRESS
Alaska	Room 129, 2221 East Northern Lights Blvd., Anchorage, AK 99504
Arizona	Room 3008, Federal Building, 230 North First Ave., Phoenix, AZ 85025
Colorado (New Mexico)	2490 West 26th Ave., Denver, CO 80211
Idaho	304 North 8th Street, Room 345, Boise, ID 83702
Montana	10 East Babcock, Room 443, Federal Building, Bozeman, MT
Nevada	50 South Virginia Street, Third Floor, Reno, NV 89505
Oregon	1220 Southwest 3rd Ave., 16th Floor, Portland, OR 97204
Utah	4418 Federal Building, 125 South State Street, Salt Lake City, UT 84147
Washington	360 U.S. Court House, Spokane, WA 99201
Wyoming	Federal Building, 100 East "B" Street, Casper, WY 82602

In addition to state reports, a Water Supply Outlook Report for the Western United States is published by the Soil Conservation Service and National Weather Service monthly, January through May. Reports may be obtained from the Soil Conservation Service, West National Technical Center, 511 Northwest Broadway, Room 514, Portland, OR 97209.

Published by other agencies:

Water Supply Outlook Reports prepared by other agencies include: California — Snow Survey Branch, California Department of Water Resources, P.O. Box 388, Sacramento, CA 95802; British Columbia — The Ministry of Environment, Water Investigations Branch, Parliament Buildings, Victoria, British Columbia, V8V 1X5; Yukon Territory — Department of Indian and Northern Affairs, Northern Operations Branch, 200 Range Road, Whitehorse, Yukon Territory, Y1A 3V1; Alberta, Saskatchewan, and N.W.T. — The Water Survey of Canada, Inland Waters Branch, 110-12 Avenue S.W., Calgary, Alberta, T3C 1A6.

TABLE OF CONTENTS

WATER SUPPLY OUTLOOK FOR NEVADA		• •	1
STREAMFLOW FORECASTS	• •	• •	. 2
RESERVOIR STORAGE	• •	6 0	3
SNOW COURSE DATA (SOIL CONSERVATION SERVICE)		• •	4-6
SNOW MEASUREMENTS (DESERT RESEARCH INSTITUTE)		• •	7
PRECIPITATION DATA	• •	• •	8-1
SNOTEL GRAPHS		•	12

ALL AVERAGES ARE FOR 1961-80 PERIOD.



WATER SUPPLY OUTLOOK FOR NEVADA

SNOW MEASUREMENTS

The Nevada snowpack is above 20-year average for all river basins with water content figures ranging from 110 to 200% of average. Sierra Nevada basins are slightly above 1961-80 averages. The Tahoe Basin is 120% of average January figures. However, snowpack accumulations are only 60% of last year. Snow water content at Heavenly Valley is 12.0 inches, as compared to 23.7 inches last year and an average of 10.3 inches.

The Truckee Basin is 130% of average and only 65% of last year's water content figures. The Mount Rose Ski Area course has 19.3 inches of snow water with a 20-year average of 16.8 inches and a 1984 measurement of 37.1 inches.

The Carson and Walker Basins are between 125 and 130% of average. Upper Carson Pass course is 56% of last year for the same date. Both basins are only 60% of last year.

Snow accumulation in the Upper and Lower Humboldt Basins is significantly above the 20-year average. The lower basin exceeds 200% and the upper basin 150%. The combined Humboldt River Basin is 170% of average and only 60% of last year.

Snowpack measurements from the Owyhee and Snake Basins are also above average, but only 50 and 65% of the record 1984 snowpack.

STREAMFLOW FORECASTS

Streamflow forecasts indicate adequate supplies for the western portion of the state and substantially above average forecasts for Northern Nevada. The Truckee River at Farad, California is forecast at 290,000 acre-feet or 108% of average. The Carson River near Carson City should produce 200,000 acre-feet for the period of April 1 through July 31.

The Humboldt River at Palisade is forecasted at 325,000 acre-feet or 140% of average. Martin Creek near Paradise Valley should be 150% of average with a total flow between April and July of 24,000 acre-feet.

RESERVOIR STORAGE

Total reservoir storage is 978,600 acre-feet or 115% of average. Lanontan and Topaz Reservoirs are the only facilities with below average storage for January 1. Wildhorse Reservoir is significantly above the 20-year average.

STREAMFLOW FORECASTS (Thousand Acre Feet) as of: January 1, 1985

Forecasts are based on snow-water presently stored in the mountain watersheds and the assumption that precipitation will be near average throughout the forecast period. Peak flow forecasts indicate the most probable range for the maximum average 24-hour flow. All averages are for 1963-77 period.

FORECAST POINT	Forecast Period	Forecast This Year	This Year as Percent of Average	Average +
TRUCKEE RIVER				
Truckee River at Farad, CA <u>1</u> / Lake Tahoe Rise in feet (assuming gates closed)	April-July April 1 to high	290 1.6	108 114	269 1.39
Little Truckee River above Boca, CA	April-July	98	106	92.5
CARSON RIVER				
East Carson near Gardnerville, NV West Carson at Woodfords, CA Carson River near Carson City, NV Carson near Fort Churchill, NV	April-July April-July April-July April-July	216 60 200 185	116 114 110 111	187 53 182 166
WALKER RIVER				
East Walker near Bridgeport, CA <u>2</u> / West Walker below Little Walker near Coleville, CA	April-Aug. April-July	76 165	115 111	66 148
HUMBOLDT RIVER				
Lamoille Creek near Lamoille, NV South Fork Humboldt above Dixie Creek, NV	April-July April-July	40 110	140 147	. 28.7 75
Marys River above Hot Springs, NV North Fork Humboldt at Devils Gate, NV Humboldt River at Palisade, NV Humboldt River at Comus, NV Martin Creek near Paradise, NV	April-July April-July April-July April-July April-July	.50 50 325 270 24	136 144 141 156 150	36.9 34.8 230 173 15.8
SNAKE RIVER				
Owyhee River near Gold Creek, NV $\frac{3}{2}$ Owyhee River near Owyhee, NV $\frac{3}{2}$	April-July April-July	32 120	137 140	23.4 85.4

NOTE: Streamflow forecasts which appear in this Bulletin are a coordinated activity of the National Weather Service and the Soil Conservation Service.

+1961-1980 period.

^{1/} Observed flow plus change in storage in Boca, Stampede and Prosser Reservoirs, Donner, Independence and Martis Creek Lakes, and minus the flow at Truckee River at Tahoe City, California.

the flow at Truckee River at Tahoe City, California.

2/ Observed flow plus change in storage in Bridgeport Reservoir.

3/ Observed flow plus change in storage in Wild Horse Reservoir.

RESERVOIR STORAGE (Thousand Acre Feet) AS OF January 1, 1985

		Usable		Usable Storage	
Basin or Stream	RESERVOIR	Capacity	This Year	Last Year	Average†
Owyhee	Wild Horse	72	60.9	59	27
Lower Humboldt	Rye Patch	194	158.6	164	89
Colorado	Mohave	1,810	1,508	1,658	1,589
Colorado	Mead	26,159	24,081	24,751	17,421
Tahoe	Tahoe	732	543.1	652	351
Truckee	Boca	41	23.0	28	17
Truckee	Stampede**	220	192.9	205	96
Truckee	Prosser***	30	9.7	10	8
Carson	Lahontan	291	148.5	242	166
West Walker	Topaz	59	13.8	41	27
East Walker	Bridgeport	42	30.7	25	24
* Adjusted average. ** Storage hegan August 1, *** Flood Control use alloca	1969. ition of 20,000 acre—feet between No	vember 1 and April 10.	1961-80) Average	

TOTAL RESERVOIR STORAGE (Thousand Acre Feet)

MONTH	This Year	Last Year	Average +
October 1	976.1	705	786
January 1	978.6	1,211	844
February 1		1,041	920
March		992	968
April 1		976 -	1,010
May 1		1,091	1,024

The above data developed from Wild Horse, Rye Patch, Tahoe, Boca, Lahontan, Topaz, and Bridgeport Reservoirs in 1,000 Acre-feet.
TOTAL USABLE CAPACITY

PEAK FLOWS (MAXIMUM MEAN DAILY) (Av. flow for 24 hrs. on day of greatest flow)

	PEAK FLOW (SECO	ND FEET)
· FORECAST POINT	Forecast Range	Average †
No for	ecast issued January 1.	

FORECAST DATE of LOW FLOW VALUES

. FORECAST POINT	•	Low Flow Value Second/ Pt.	Forecast Date Stream Will Recede to Low Flow Value	Average Date of Low Flow Value
		Second/Pt.	to Low Flow Value	

No forecast issued January 1.

BASIN SUMMARY OF SNOW COURSE DATA

JANUARY 1985

	SNOW COURSE	ELEVATION	DATE		WATER CONTENT		AVERAGE 1961-80
0.13							
i (~) (*)	E TAHOE						
	ECHO PEAK (CA)	7800	1/01/85	74	23.0E	40.8	16.1
	ECHO SUMMIT (CA)	7450	1/02/85	44	15.4		12.0
	FALLEN LEAF (CA)			19	4.5	2.2	
	FREEL BENCH (CA)			27	6.2E		5.1
	GLENBROOK #2		1/01/85			7.6	
	HAGANS MEADOW (CA)		1/01/85	28	6.65		7.2
	HEAVENLY VALLEY (CA)		12/27/85		12.0		10.3
	LAKE LUCILLE (CA)	· ·	1/01/85		28.9E		
	MARLETTE LAKE		1/01/85		10.55		
	RICHARDSONS #2 (CA)		12/30/85	26	6.6		
	RUBICON #1 (CA)		12/27/85	75	23.4E		
	RUBICON.#2 (CA)			40		21.7	
	TAHOE CITY CROSS(CA)		1/01/85		8.2		5.0
			12/27/85		16.8		14.2
	WARD CREEK #3 (CA)	6750	1/01/85	48	14.55	24.8	11.6
TRU	CKEE RIVER						
	BIG MEADOWS (CA)	8300	1/01/85	33	10.15	20.6	
	CASTLE CREEK (CA)	7400	12/31/85	70	26.1	44.5	
	DONNER SUMMIT (CA)	6900	1/FN/85	53	19.4	20.7	15.3
	FORDYCE LAKE (CA)	65 00	1/02/85	54	21.0	24.5	
	FURNACE FLAT (CA)	6700	1/02/85	62	23.4	33.5	
	INDEPENDENCE CAMP CA	7000	1/01/85	28	8.55	15.4	7.2
	INDEPENDENCE CREEK	4500	1/01/85	. 25	7.65	7.9	4.5
	INDEPENDENCE LAKE CA	8450	1/01/85	58	17.48	36.3	13.9
	MT. ROSE	9000	1/01/85	37	12.05	29.4	11.4
	MT. ROSE SKI AREA	9000	12/27/85	54	19.3	37.1	16.8
	SAGEHEN CREEK (CA)		1/01/85	28	6.5E		
	SQUAW VALLEY #2 (CA)	7500	12/27/85	69	21.4E	24.0	
	SQUAW VALLEY G.C., CA	4 - 8200	1/01/85		17.85		18.5
	TAHOE CITY CROSS(CA)				8.2		6.0
	TRUCKEE #2 (CA)	6400	1/01/85	20	5.2	8.1	4.7

	SNOW COURSE	ELEVATION	DATE	SNOW DEPTH	WATER CONTENT	LAST YEAR	AVERAGE 1961-80
CAR	SON RIVER						
l	BLUE LAKES (CA) CARSON PASS, UP (CA EBBETTS PASS #2 (CA POISON FLAT #2 (CA) SPRATT CREEK (CA) 19L31 IS NOT ON FIL 19L20 IS NOT ON FIL) 8700 7900 6080 E	1/01/85 1/06/85 1/01/85 1/01/85 1/01/85	27 47 62 29 14	18.18 18.0 18.38 8.18 4.58	23.4 32.1 33.4 11.0 3.1	13.7 14.8 7.7
WAL	KER RIVER						
	CENTER MOUNTAIN (CA LEAVITT MEADOWS (CA LOBDELL LAKE (CA) SONORA PASS (CA) VIRGINIA LAKES (CA) VIRGINIA LAKES RIDG	7200 9200 8800 9500	1/01/85 1/01/85 1/01/85 1/01/85 1/01/85 1/01/85	59 18 26 53 37 37	18.4E 4.4S 6.7S 16.6E 8.7S 8.7S		6.1 6.3 9.2 6.7 7.0
NOR'	THERN GREAT BASIN						·
B	CEDAR PASS (CA) DISASTER PEAK DISMAL SWAMP #2 (CA GOVERNMENT CORRALS	7000	1/01/85 1/01/85 1/01/85 12/27/85		12.1S 6.0S 18.9 9.2	14.9 17.2 26.7	8.1 5.4 10.5
SNAI	KE RIVER						
1000	BEAR CREEK FOX CREEK GOAT CREEK HUMMINGBIRD SPRINGS POLE CREEK R.S. SEVENTYSIX CREEK	6800 8800	1/01/85 1/01/85 1/01/85 1/01/85 1/01/85 1/01/85	29 48 38	12.4E 6.8E 12.1E 15.5E 11.9E 7.9E	16.8 16.8	8.0 8.6 9.7 7.7 4.9
OWY	HEE RIVER						
	BIG BEND FAWN CREEK #2 GOLD CREEK JACK CREEK, UPPER JACK CREEK #2,UPPER JACKS PEAK LAUREL DRAW TAYLOR CANYON	8420 6700	1/01/85 1/01/85 1/01/85 1/01/85 1/01/85 1/01/85 1/01/85 12/27/85	42 8	3.5E 11.9S 1.9E 5.7E 10.3S 13.9E 6.1S 3.1	13.0 9.5 10.2 19.6 25.4 13.6 10.6	3.2 9.4 3.4 5.4 3.3 2.1

SNOW COURSE	ELEVATION	DATE	SNOW DEPTH	WATER CONTENT	LAST YEAR	AVERAGI 1961-8
LOWER HUMBOLDT RIVER						
BIG CREEK SUMMIT BUCKSKIN, UPPER GRANITE PEAK LAMANCE CREEK MARTIN CREEK UPPER HUMBOLDT RIVER	87,00 8200 7800 6000 6700	1/01/85 1/01/85 1/01/85 1/01/85 1/01/85		11.58 10.5E 11.3E 8.4E 4.8E		5.3 7.6 4.4
CORRAL CANYON DORSEY BASIN DRAW CREEK #2 FRY CANYON GREEN MOUNTAIN LAMOILLE #3 LAMOILLE #5 TREMEWAN RANCH	8500 8100 7450 6700 8000 7700 8700 5700	1/01/85 1/01/85 1/01/85 1/01/85 1/01/85 1/01/85 1/01/85 1/01/85	33 30 31 15 41 34 63	7.98 7.28 7.88 3.3E 9.88 7.58 15.7E	15.6 16.7 16.2 10.5 18.9 10.4 32.5 5.4	5.3 5.1 3.2 6.7 5.0
EASTERN NEVADA						
WARD MOUNTAIN #2	9200	1/01/85	35	7.85	9.4	3.8

DESERT RESEARCH INSTITUTE MEASUREMENTS		2		SNOW	WATER	LAST	AVERAGE
Alder Creek	SNOW COURSE	ELEVATION	DATE	DEPTH	CONTENT	YEAR	1961-80
Alder Creek Aoollo Way Franktown Aoollo Way	DESERT RESEARCH INSTITUTE ME	ASUREMENTS					
Abollo Way	TAHOE-TRUCKEE BASIN						
	Apollo Way Bennett Flat Brockway Summit Clear Creek Cliff Ranch, Franktown Davis Creek Evergreen Hills Fuller Lake Galena Creek Henness Pass Junction Hobart Mills Incline Lake Jones Creek Junction 395 & Nevada 27 Lancer Little Valley Mount Rose Resort North Star Fire Department RNR Forestry Site Reindeer Lodge Sagehen Creek Sky. Tavern Spooner Summit Souaw Valley Fire Department Tahoe City Tahoe Meadows Tamarack Lake Third and Incline Creeks Thunder Cliff Truckee-Tahoe Airport	7,300 6,200 7,200 5,700 5,250 5,160 5,700 6,200 7,440 6,410 5,850 8,000 6,000 4,590 5,110 6,540 8,280 6,320 6,400 7,620 7,620 7,620 7,620 6,240 8,540	12/29/84 12/28/84 12/29/84 12/28/84 12/28/84 12/28/84 12/28/84 12/29/84 12/29/84 12/29/84 12/29/84 12/28/84 12/28/84 12/29/84	25 26 32 6 5 4 8 31 26 16 37 10 0 17 41 17 16 21 22 30 22 54 38 31 29	7.9 7.6 10.1 0.5 1.0 9.7 7.6 3.4 12.5 0 5.2 13.8 4.0 4.1 6.4 7.2 8.7 19.9 0.5 1.7	14.6 8.8 15.2 0 0 0 16.6 9.0 4.3 0 7 29.3 2.9 2.8 9.2 8.0 18.7 12.6 10.2 8.3 36.5 30.4 9.2 7	

T=TRACE

PRECIPITATION DATA

JANUARY 1985

		CEMBER	WATER	
PRICIPITATION STATION	THIS YEAR	61-80 AVERAGE	TOTAL TO DATE	61-80 AVERAGE
ARTHUR 4NW, NV	.84	1.73	5.39	4.33
AUSTIN, NV	. 45	1.17	3.22	3.25
BATTLE MOUNTAIN, NV	.38 3.10	.85 5.17	2.98	2.54
BEAR CREEK,NV BERRY CREEK,NV	3.10 N D		12.30	10.29
BIG BEND, NV	1.50	2.28	6.10	5.25
BIG CREEK SUMMIT, NV	1.70	1.70	8.10	3.85
BOIES RESERVOIR	N O	REPORT		
BUCKSKIN LOWER, NV	1.60	3.25	9.10	9.40
CALIENTE	NO	REPORT		
CARSON CITY	.21	•	3.92	
CEDAR FASS	2.70		19.40	 5. <i>7</i> 3
CEDARVILLE CONTACT	.73 1.07	2.77 .85	5.60 2.41	2.57
CORRAL CANYON, NV	1.80	2.55	10.70	7.10
DEETH	1.56		4.32	
DENIO	1.10	.77	6.20	2.58
DESSERT ROCK	1.91		3.82	
DIAMOND PEAK	1.80		6.00	am an an
DISMAL SWAMP	4.20		23.20	
DISASTER PEAK, NV	2.00	4.90	9.60	9.90
DORSEY BASIN,NV DRAW CREEK	2.10 N O	3.63 REPORT	10.60	8.75
DUFURRENA, NV	.88	.68	4.19	2.00
ELKO, NV	. 45	1.01	3.60	2.48
ELY, NV	.76	.74	3.16	2.12
EMIGRANT PASS, NV	.56	1.06	4.81	3.28
FAWN CREEK #2,NV	2.60	2.10	12.50	7.10
FALLON EXP. STN.	. 06.		1.41	
FALLON NAS	N D	REPORT		
FERGUSON RANCH	NO	REPORT		
FORD CORRAL FRY CANYON		R E P O R T		
FORTY-NINE MOUNTAIN	N O	REPORT		
GOAT CREEK, NV	3.20	4.80	12.20	9.30
GRANITE PEÁK,NV	2.10	4.50	14.00	11.80
GREEN MOUNTAIN, NV	2.30	7.40	11.00	13.00
HAWTHORNE	.00		. 66	
HOLE-IN-MOUNTAIN, NV	N O	REPORT	4.75 / 27	0.05
JACK CREEK ,UPPER,N	2.40	3.55	10.60	8.95

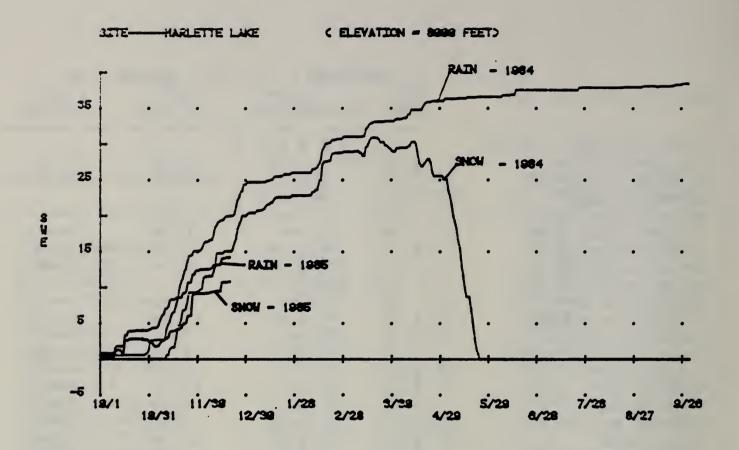
	DECEMBER		WATER YEAR	
PRECIPITATION STATION	THIS YEAR	61-80 AVERAGE	TOTAL TO DATE	61-80 AVERAGE
JACK'S PEAK,NV	3.20		12.80	21.00
JIGG'S	.71		3.52	
LAMANCE CREEK	2.00		12.10	
LAMOILLE, NV		1.45	5.89	4.31
LAMOILLE #3,NV LAS VEGAS	1.68	4.35	2.63	8.65
LAUREL DRAW, NV	2.20		11.10	9.90
LOVELOCK FAA	N O		TT # T/M	7 . 70
MARTIN CREEK RS, NV	ΝО			
MINDEN	N O	REPORT		
MONTELLO .	.10		1.56	1.70
MOUNTAIN CITY RS,NV	. 47		3.64	3.67
MT. ROSE/XMAS TREE		REPORT	و بسر و	year, year, may
OROVADA, NV	. 23		4.81	2.97
OWYHEE,NV PARADISE VALLEY,NV		1.41 1.18	4.54 4.56	3.89 2.94
PEQUOP	.52		3.05	£ = 7 ⁴
PINYON MINE (NE WMC)	.23	*	2.74	
PIOCHE		REPORT		
POLE CREEK RS, NV	1.50	3.27	6.80	6.32
RENO WSFO	.07	****	2.35	
RENO UNR	.10			
RODEO FLAT, NV		REPORT		
RUBY LAKE	.73		5.14 7.80	6.71
SEVENTYSIX CREEK,NV SKY TAVERN	2.00 N D	2.40 REPORT	7.80	0.71
SPARKS-FIRE DEPT	.06		2.24	
SPARKS-COBB	N O	REPORT		
STATELINE	. 42		3.13	
TAYLOR CANYON, NV	.80	1.90	4.40	4.30
TONOPAH	.70		1.18	
TROUT CREEK, LOWER	N O	REPORT		
TUSCARORA, NV	N O	REPORT	6.60	
VIRGINIA CITY WARD MOUNTAIN,NV	.62 4.90	1.65	11.10	6.20
WILDHORSE RESERVOIR	.52	1:00	3.82	man ann
WELLS	. 45	. 89	3.14	2.70
WINNEMUCCA	.36		3.55	con
YERINGTON	.01		.89	unusi attito evere

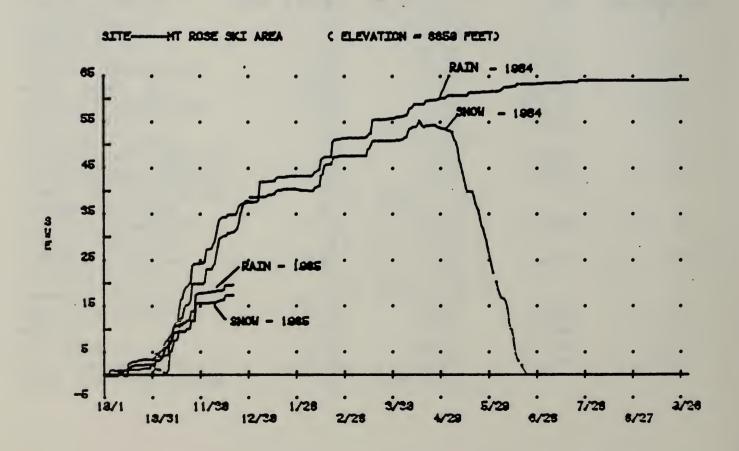
PRECIPITATION DATA

JANUARY 1985

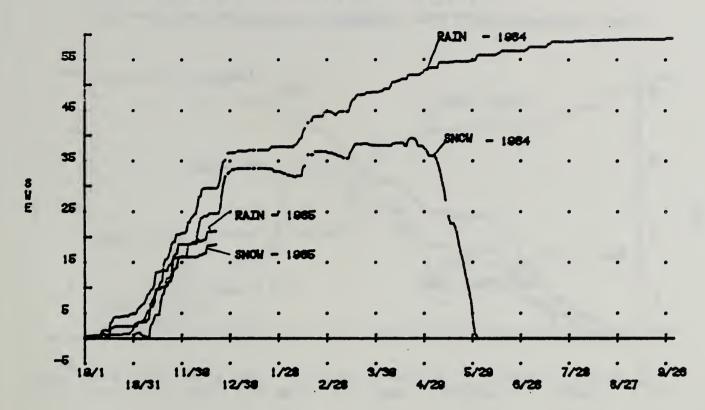
PRECIPITATION STATION	THIS	EMBER 61-80 AVERAGE	WATER TOTAL TO DATE	61-80
ALTURAS BIG MEADOWS,NV	.46	1.65	4.72 15.30	4.26
BISHOP WSO	.85		2.98	
BLUE CANYON	3.58		26.08	
BLUE LAKES,CA	18.10	7.50	39.60	17.95
BOCA	.80	3.89	10.09	7.90
BRIDGEPORT-SHERIF	1.45	1.81	4.29	
BRIDGEFORT R.S.	.35			
CEDAR PASS, CA	2.70		14.80	
CEDARVILLE DAGGETT PASS	.73 1.05	2.77	5.40 8.40	5. 73
DISMAL SWAMF, CA	4.20	7.85		22.00
DONNER PARK, CA	N O		المانية المانية	22200
EBBETTS PASS, CA		- 8.20	38.40	17.43
ECHO PEAK, CA	N O			
ECHO SUMMIT (S.S.R.)	2.29		23.81	
ELLERY LAKE	N O			
FALLEN LEAF, CA	7.30	5.55		
FT BIDWELL	.71	2.43	mino mino mino	5.60
GEIGER SUMMIT		REPORT		, a.m
GLENBROOK, NV	. 67	2.94	5.33	6.05
HAGAN'S MEADOW,CA HAPPY CAMP, CA	1.30 2.11	3.35 	11.70 30.53	7.77
HEAVENLY VALLEY, CA	1.50	4.55		
HETCH-HETCHY	1.49	6.27		12.70
INCLINE VILLAGE	N O			
INDEPENDENCE CAMP, CA	1.50	5.29	12.60	11.78
INDEPENDENCE CREEK, C	1.20	3.87	12.80	15.62
INDEPENDENCE LAKE, CA		REPORT		
KINGSBURY GRADE	N O	REPORT	a a mare	,
LEAVITT MEADOW, CA	2.00	5.00	11.90	13.75
LITTLE VALLEY, NV	N 0 8.90		16.40	7.18
LOBDELL LAKE,CA MAMMOTH R.S.	, 8. 70 N D	3.20 REPORT	10.40	/ . 10
MAMMOTH (MIDWAY)	N O	REPORT		
MARLETTE LAKE, NY	2.20	4.83	14.20	11.21
MEYERS	.96		9.86	
MT. ROSE, NV	1.60	5.08	14.40	11.69
MT. ROSE SKI AREA,NV	2.00	11.25	20.70	25.55
FINE NUT MTNS., LOWER	N O	REPORT		

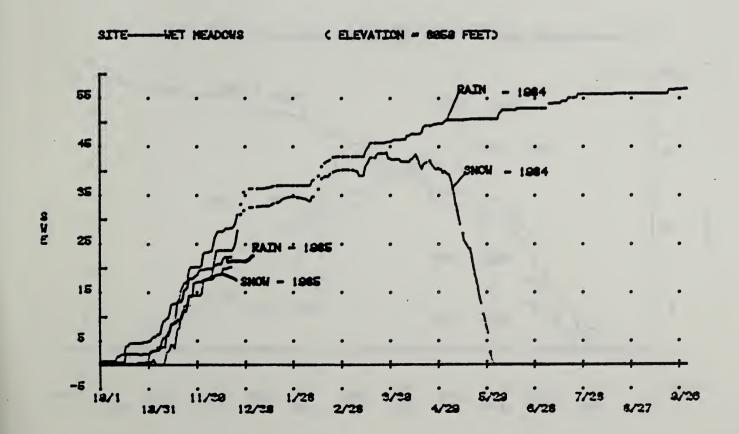
	DECEMBER		WATER YEAR	
PRECIPITATION STATION		61-80 AVERAGE	TOTAL TO DATE	
PINE NUT MTNS., UPPER	N O	REPORT		
POISON FLAT, CA	8.10	4.95	18.20	12.30
RÚBICON #2,CA	2.40	7.70	17.70	19.90
SAGEHEN CREEK	N O	REPORT		
SIERRAVILLE R.S.	.72		9.95	manufa manufa adaliki
S LAKE TAHOE APRT	. 98		10.29	with two with
SONORA PASS, CA	2.70	5.10	17.00	11.08
SPRATT CREEK, CA		5.45	13.70	13.65
SQUAW VALLEY G C	ΝО	REPORT		
SUSANVILLE ARPT	.58		4.93	
TAHOE CITY-DUKES	1.41	6.39	13.56	12.46
TAHOE CITY-USCG	1.21			
TAHOE CITY CROSS, CA		8.30	14.20	19.95
TRUCKEE ARPT	1.03		8.19	
TRUCKEE F/P	1.30		12.90	
TRUCKEE RS		6.14	14.91	
TRUCKEE #2,CA	2.00	4.80	12.10	16.40
TWIN LAKES		8.59		
VIRGINIA LAKES,CA		1,87		2.28
WARD CREEK #3,CA	3.80			
WET MEADOWS, CA	3.70		22.40	
WOODFORDS	.63	3.96	8.05	8.16
ZEPHER COVE	ΝО	REPORT		

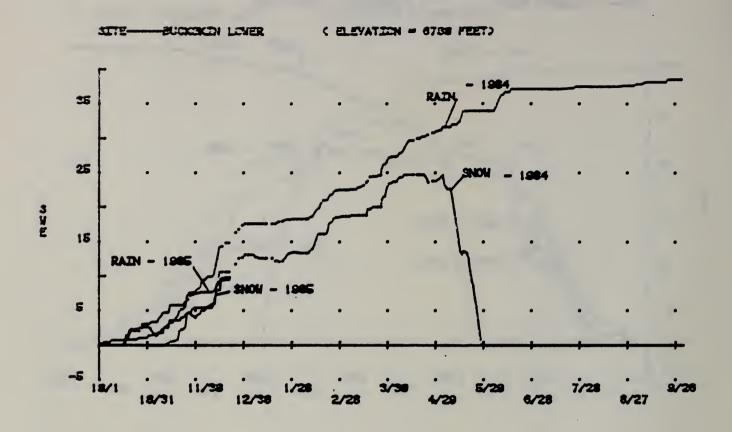


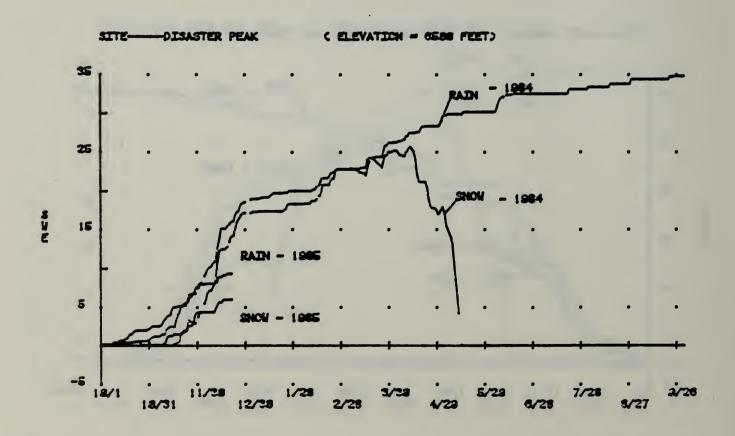


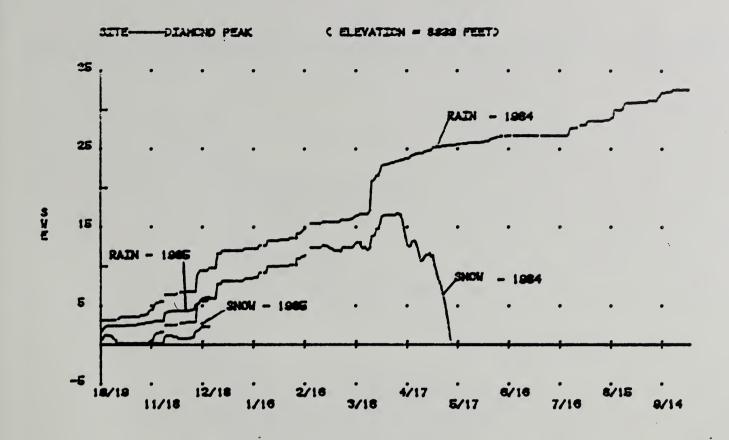


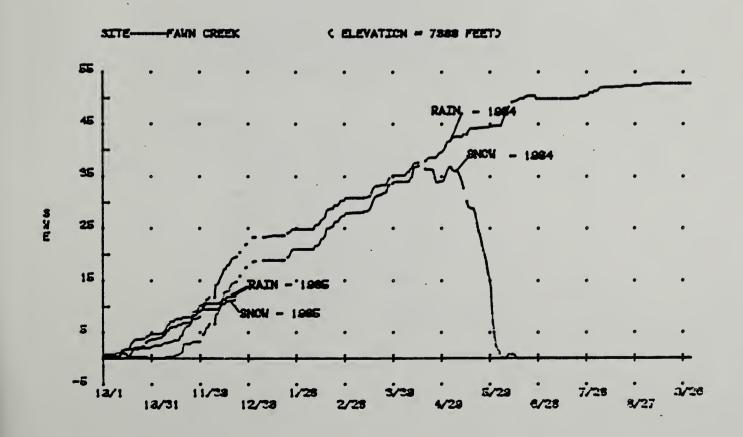


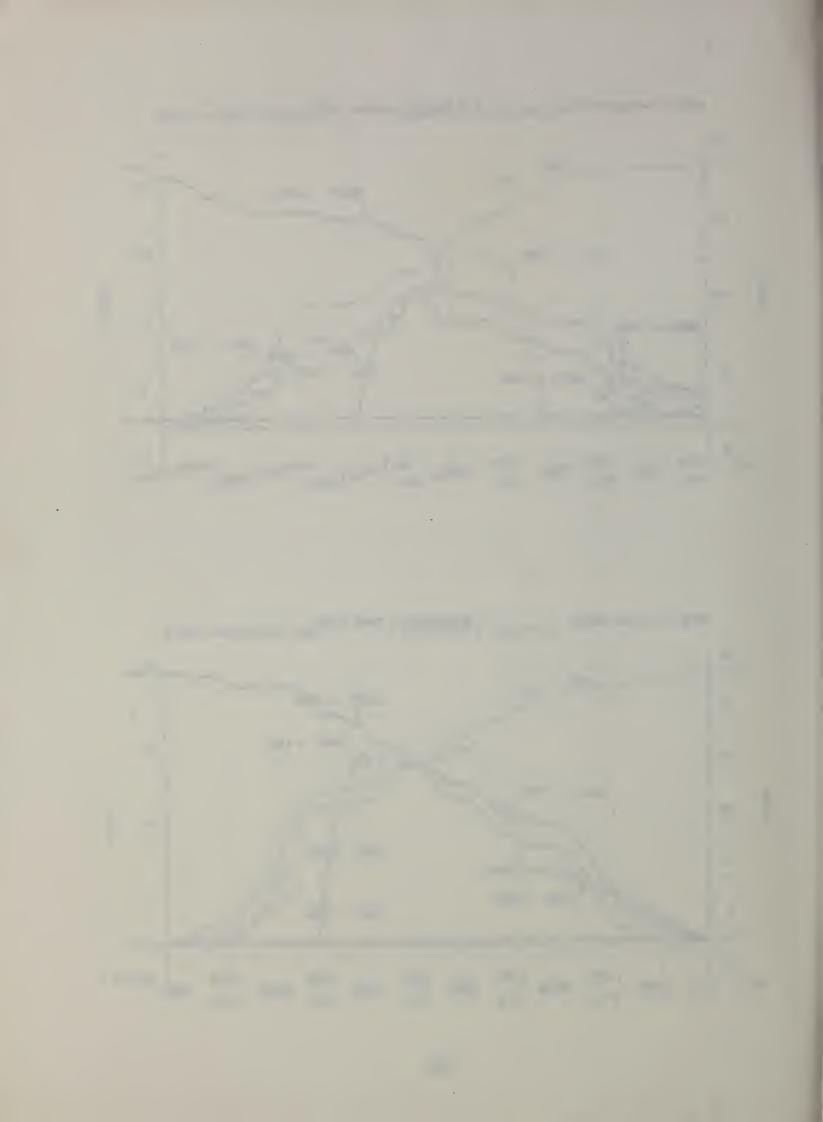












AGENCIES COOPERATING IN COLLECTING DATA CONTAINED IN THIS BULLETIN

FEDERAL

Agricultural Research Service
Bureau of Reclamation
Fish and Wildlife Service
Forest Service
Geological Survey
Soil Conservation Service
U.S. District Court - Federal Water Master
NOAA, National Weather Service

STATE

California Cooperative Snow Surveys
California Department of Parks and Recreation
California Department of Water Resources
Colorado River Commission of Nevada
Idaho Cooperative Snow Surveys
Nevada Association of Conservation Districts
Nevada Department of Conservation & Natural Resources
Division of Water Resources
Nevada State Forester
Division of Conservation Districts
Oregon Cooperative Snow Surveys
University of Nevada, Desert Research Institute

PRIVATE

Amalgamated Sugar Company
Kennecott Copper Corporation
Nevada Irrigation District
Owyhee Project North Board of Control
Owyhee Project South Board of Control
Pacific Gas and Electric Company
Pershing County Water Conservation District
Sierra Pacific Power Company
Truckee - Carson Irrigation District
Walker River Irrigation District
Washoe County Water Conservancy District

Utah Cooperative Snow Surveys

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Furnishes the basic data necessary for forecasting water supply for irrigation, domestic and municipal water supply, hydro-electric power generation, navigation, mining and industry.

"The Conservation of Water begins with the Snow Survey"

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